



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

tion of the beds which contained them is near the base of the lower Cretaceous formation, or top of the upper Jurassic, they are insufficient to mark the definite horizon to which the series should be referred. It is sufficiently obvious that they exhibit a blending of the life of the Cretaceous period with that of the Jurassic."

ROMINGER'S FOSSIL CORALS OF MICHIGAN. — This is a treatise on the indigenous fossil corals of Michigan, forming the palæontology of the Reports on the Geology of the Lower Peninsula of Michigan. The value of the work is greatly enhanced by the large number of excellent photographic figures, printed by the Albertotype process. There are fifty-five plates, each usually containing four figures. A good many new species are described, and the work bears evidence of care in its preparation.

GEOGRAPHY AND EXPLORATION.

GEOGRAPHICAL PROGRESS IN 1876.¹ — The geographical feature of the past year has been the increased interest shown in the enlargement of geographical knowledge, not only by the investigations and explorations which have taken place and the discoveries which have been made, but by the establishment of geographical societies in Denmark, Spain, and Portugal, by a large increase of members in the leading societies of England, France, and Italy, and in the inauguration by the king of Belgium of an international organization, composed of prominent geographers, African explorers, and the heads of the leading geographical societies of the world, to carry on the work of exploring and civilizing the interior of Africa upon a systematic plan, — a movement of great interest, and which in all probability will lead to very important results. The Challenger returned May 24, 1876, after an absence of nearly four years.

Archæological researches have during the past year been active and attended with interesting results. E. T. Wood, who spent eleven years in exploring the site of the City of Ephesus, contending with marauding brigands, and working in pits and trenches almost constantly under water, has during the year published the account of his labors. The German archæologists, Drs. Hirschfeld and Weil, and Mr. Bötticher, have been engaged during the year in making excavations at Olympia, in Greece, which, beside clearing the ruins of the temple and laying bare its marble pavement, have led to the discovery of numerous inscriptions, sculptures, and other objects of interest. The site of the celebrated temple, which for centuries was a dreary waste, has now, in consequence of these discoveries, become a resort for tourists. Mr. L. P. di Cesnola, who has been absent for three years continuing his researches in Cyprus, ended his labors last autumn, and is now upon his return to this city. He has discovered the site of Kurium, mentioned by Strabo, of which

¹ Abstract of Judge Daly's Address at the Annual Meeting of the American Geographical Society, New York, January 23, 1877.

no trace existed, identified the great temple of Apollo, and discovered the treasure chambers of another unknown temple, filled with innumerable votive offerings. He says that his last three years' excavations have surpassed those of the seven preceding years. Dr. Schliemann has followed up his excavations upon what he supposed to be the site of ancient Troy, by excavations upon the site of Mykenæ. Mykenæ is the most ancient city in Greece. It is identified with the poems of Homer, and Dr. Schliemann supposes that he has found the tombs of Agamemnon, Clytemnestra, and other Homeric personages. But whether he has or not, he has found and opened tombs which, from their cyclopean structure, belong to a very early period of Greek civilization. His excavations, which have been extensive, disclose the general topography of this very ancient and wealthy city, the monumental and other remains of which he carries back to 1200 B. C., the period to which the Homeric poems are usually ascribed.

In the United States the Coast Survey has made careful soundings in the Gulf of Mexico; the Hydrographic Bureau has assisted in correcting the charts of the West India Islands; the survey of the lakes has been carried on by the United States Engineer Corps; Colonel Ludlow's report of his reconnaissance from Carrol in Montana to the Yellowstone National Park has been published; the explorations of Lieutenant Wheeler west of the one hundredth meridian have been continued; Lieutenant Bergland has completed the examination of the Colorado River; Professor Hayden's explorations and other work have been carried on; Major Powell's expedition organized six field parties which surveyed much of Utah and Nevada. Under the direction of the Smithsonian Institution Judge J. G. Swan, of Portland, Oregon, has made a very interesting collection, illustrating the arts and industries of the Indian tribes, both of Western Oregon and Washington Territory. The Signal Service Corps, under the able direction of General Albert J. Meyer, is making rapid advances toward a complete knowledge of the conditions and causes of the American climate. It has nearly completed the most extensive collection of altitudes of places in North America which has ever been gathered. The list includes several thousand profiles, representing almost every railroad and canal. From this and other data it is making a relief model of North America on a large scale.

The Arctic event of the year has been the return of the English expedition, the Alert and the Discovery, under Sir George Nares, from the attempt to penetrate the Pole by the way of Smith's Sound. Regarded from a geographical and scientific point of view, the expedition was a success. I said in my annual address several years ago that to reach the Pole was not the main object in an Arctic expedition; that that was a mere geographical feat, to which necessarily great *éclat* would be attached; but that the real object of such an expedition was to explore the Arctic region in every direction, as far as possible, to obtain scientific in-

formation in a quarter of the globe where it was of the highest interest not only as respects the past physical history of the earth, but to enable us to unravel phenomena and obtain a knowledge of physical laws affecting its present condition which are of high scientific value, or, to express it in a popular form, of the greatest practical importance. This object has been to a considerable degree advanced by this English expedition. The *Alert* not only attained the highest latitude — $82^{\circ} 24'$ — ever reached by a vessel, and the sledge expedition, under Commander Markham, the furthest northern point reached by man, — $83^{\circ} 20' 26''$ N. lat., but the expedition, in an unknown region, discovered and traced a line of coast extending over nearly fifty degrees of longitude, ascertained to a considerable extent the nature of the Polar Sea bordering this newly discovered coast, and collected a large amount of scientific information in the examination of both land and sea.

The rivers, coast, and interior of Western Africa have been explored by Beaumier, Tissot, Bonnat, Brazza, Marche, Duparquet, Lux, and others. The most important event in Africa of the year has been the circumnavigation of the Mwutan Nizige (Albert Nyanza), by M. P. Gessi, a member of Colonel Gordon's organization, who estimated the lake to be one hundred and forty miles in length by fifty in breadth. Its banks were clothed with a dense forest, the western side was mountainous, and the southern end shallow. This exploration establishes the connection between this lake and the Nile. From united statements of Gessi and Colonel Gordon, very recently received, it appears that the White Nile is navigable the whole way from Dufli to the lake, a distance of one hundred and sixty-four miles. About twenty miles south of Dufli the river widens, the current is less rapid, and from there to Magungo (on the lake) the river is nothing more than a part of the Mwutan Nizige. This river or expansion of the lake is broad, deep, and filled with islands of papyrus which make the banks difficult of approach. About one hundred miles from Dufli there is a large branch of the river extending north-northwest in the direction of the Nyam-Nyams.

Mr. Stanley, after exploring the west and southwestern shores of Lake Ukerewe (Victoria Nyanza), started from Dumo on its western shore and crossed the country of Unyora to the Mwutan Nizige (Albert Nyanza), and reached that lake at a point where a deep gulf (Beatrice Gulf), formed by a promontory called Unsongora, runs out for thirty miles in a southwesterly direction. In his journey Stanley saw a mountain southeast of the Mwutan Nizige, which was reported to be from thirteen thousand to fifteen thousand feet high, called Gamboragarè, on the peak of which snow is frequently found. The exact position of this camp on the lake, as given by him, is $31^{\circ} 24' 30''$ E. long., and $0^{\circ} 25' 6''$ N. lat. Stanley, when last heard from in July, was on his way to Unamyembi, his intention being to proceed to Ujiji to explore Lake Tanganyika, and then endeavor to strike north toward the

Mwutan Nizige. An object of geographical interest at present is the great island of New Guinea, which, notwithstanding its magnitude, its fruitfulness, and position in the great ocean highway in which it is placed, was thirty years ago put down in the geographies as a *terra incognita*, or, as the geographer Murray expressed it, "viewed only by navigators at a distance." During the last five years it has been the scene of active explorations by Beccaria, D'Albertis, Moresby, Rosenberg, Maclay, the Russian explorer, Macleay, the English explorer, Macfarlane, Stone, and others.

MICROSCOPY.¹

SAN FRANCISCO MICROSCOPICAL SOCIETY. — At the annual meeting of this society, held February 1st, the President, Prof. Wm. Ashburner, gave the usual annual address, in which he summed up with more than usual directness and precision the last year's progress and present standing of the society. The excellent financial condition was mentioned as a cause of increasing gratification and encouragement. The society comprises at present thirty resident, ten life, five honorary, and forty-one corresponding members; the resident membership being one less than last year, while the active membership, including resident, life, and those of the honorary members who reside in San Francisco, now aggregates forty-four, or three more than at the date of the last report. This very satisfactory condition has been attained without any effort to increase the membership. The only honorary member elected during the year was Mr. H. G. Hanks, one of the founders of the society and its president during the first three years. During the year twenty-three meetings were held without one failure for want of a quorum, with an average attendance of between eleven and twelve, or the same as the previous year, while the attendance of visitors was less than before. At the annual reception nineteen members participated and two hundred and eighty visitors were in attendance. The exhibition was notably successful, but the effort to present a somewhat orderly arrangement of objects representing in a proper series the different kingdoms of nature was, owing to want of time for maturing the plan, less fully satisfactory than it is expected to be in future after further labor and study. The library contains two hundred and thirty-seven volumes, an increase of one hundred and three over last year. The cabinet now contains five hundred and twenty-three slides, an increase of ninety-four, the set of animal parasites being especially full and numbering seventy slides. Some interesting apparatus has been acquired by purchase and donation; and the occupation of new and pleasant rooms has made the past year conspicuous in the history of the society. Alluding to the previously reported failure to attain a fully satisfactory result in the way of resolving difficult diatoms, and especially the last

¹ Conducted by DR. R. H. WARD, Troy, N. Y.